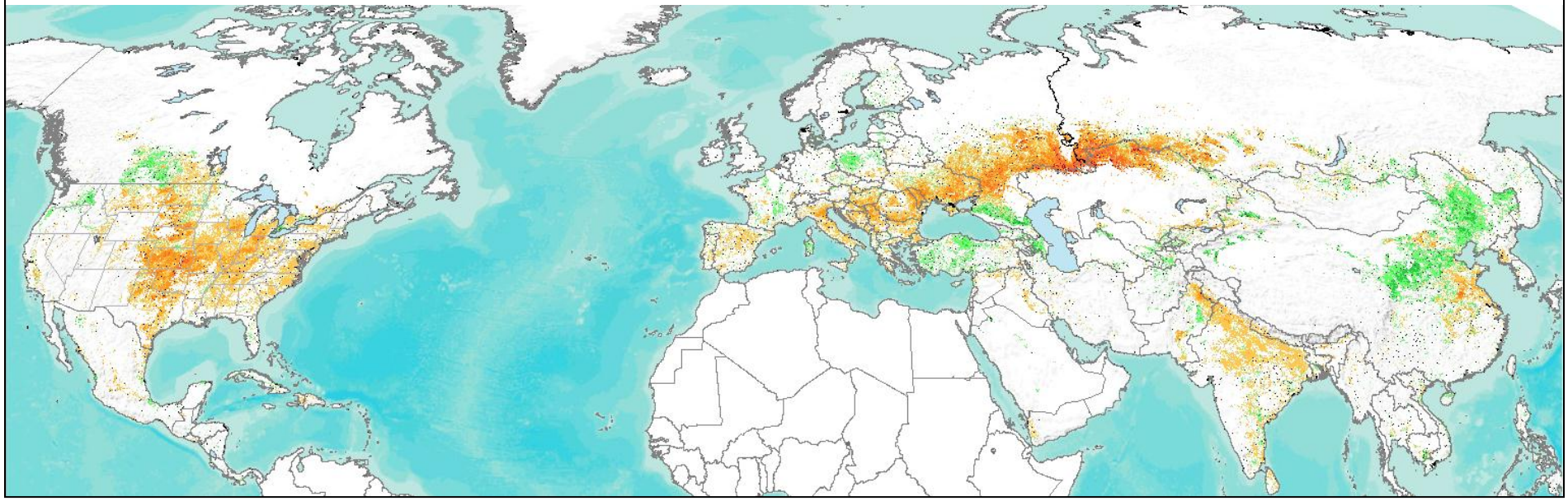
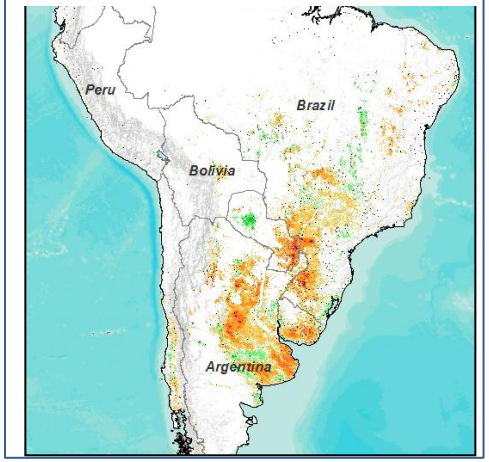
Tracking impacts of 2012 droughts on crop condition through satellite observations

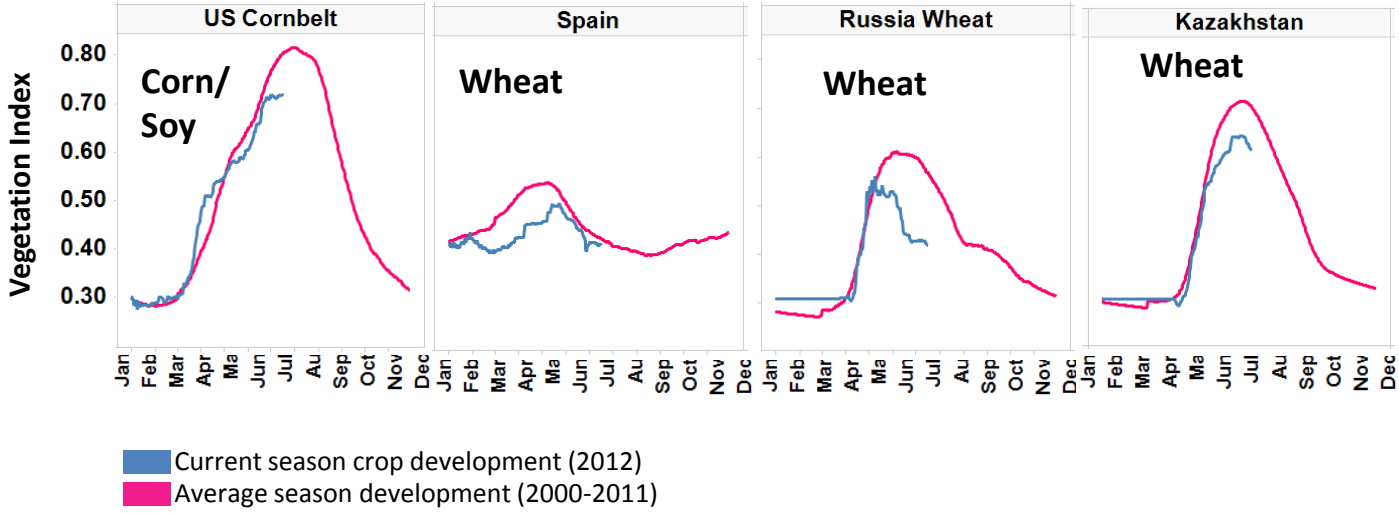
- “World markets are not yet facing a crisis of the kind seen in 2007/08 when high food prices sparked riots in some poorer countries, although soaring grain prices fuelled by an intense U.S. drought are a cause for concern, the UN's food agency said.” Reuters Friday July 20th
- Currently droughts are affecting production in multiple main agricultural producer & export countries including the USA, Russia, Kazakhstan, Ukraine.
- Satellite imagery can depict the current crop conditions worldwide and provide timely global information on the extent of the damage to crops due to the current droughts. Satellites provide a timely and cost-effective means to observe crop conditions over the global agricultural lands.
- The impact of the drought is depicted through vegetation condition anomaly images covering the primary cropland areas. These images compare the current crop conditions relative to average conditions. Red and orange represent areas where crop condition is worse than normal where as green areas represent areas where crop conditions are better than normal.
- Although timely rains can help to alleviate the drought and mitigate the impact on crop production the satellite imagery indicate widespread crop damage during this critical period of the summer growing season.

Crop Status in Northern Hemisphere over Agricultural Regions, July 17, 2012

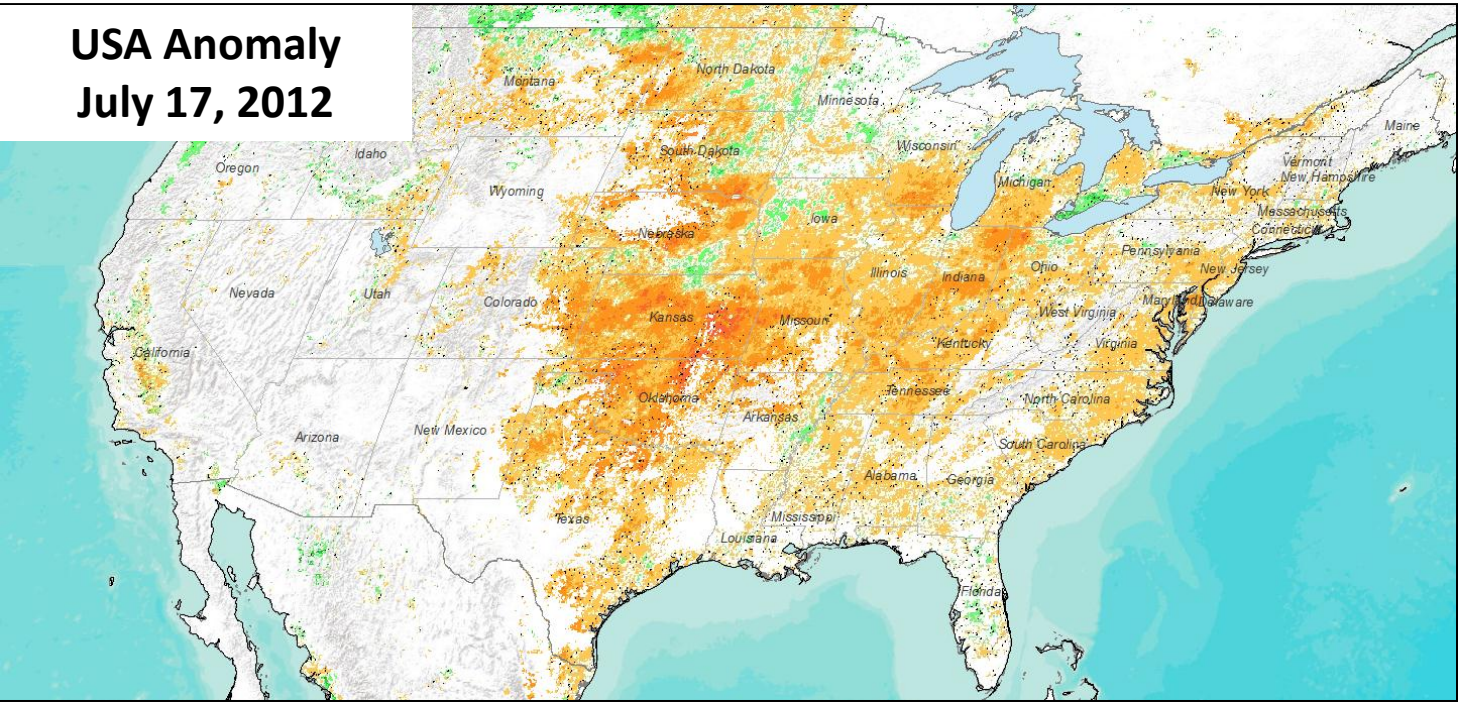


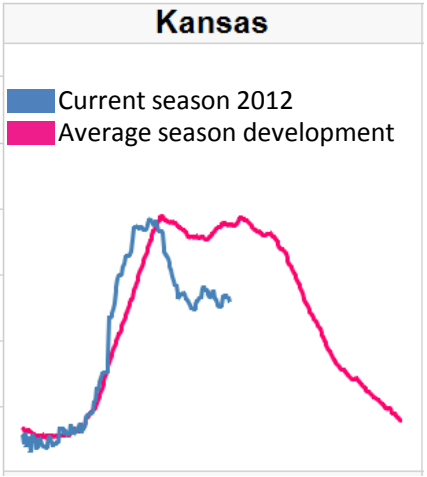
S. America Anomaly in Soy/Corn regions, 2012 growing season (February 14, 2012)





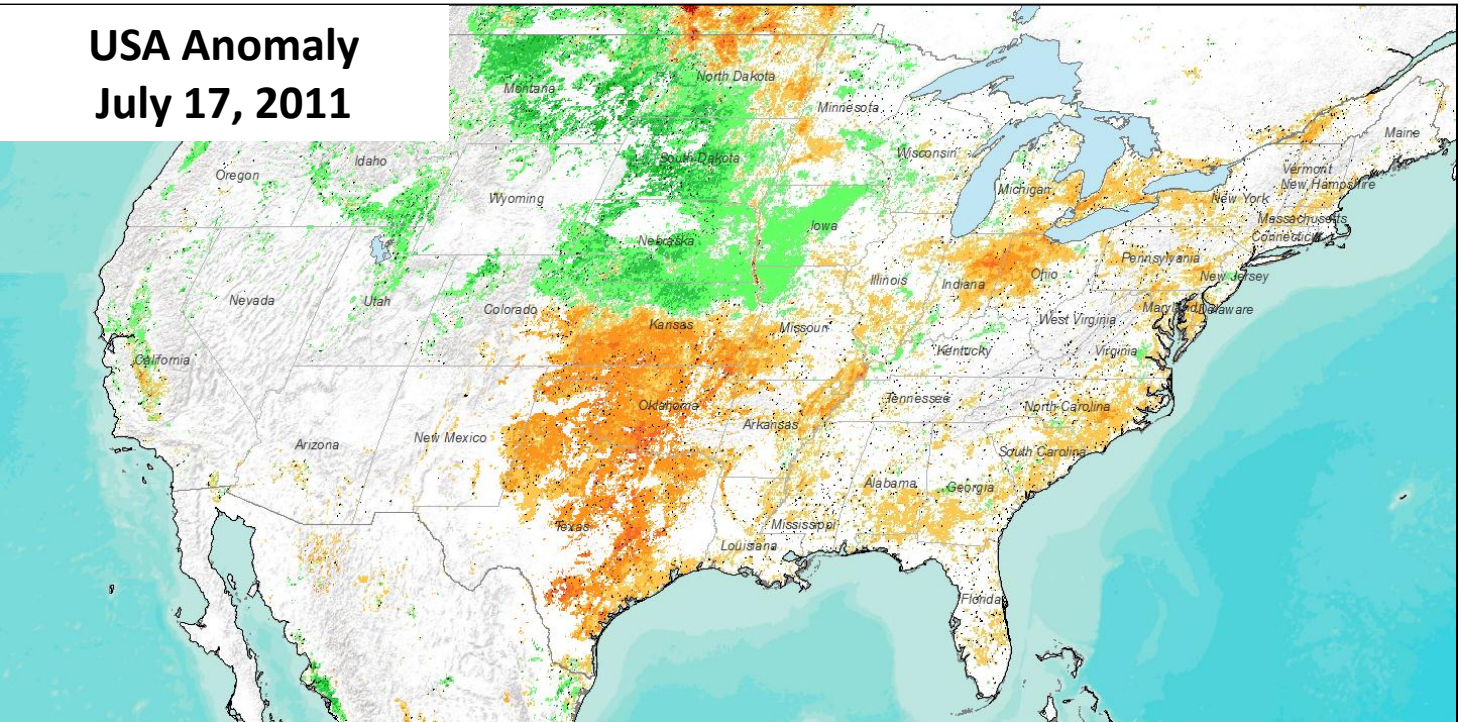
USA Anomaly July 17, 2012





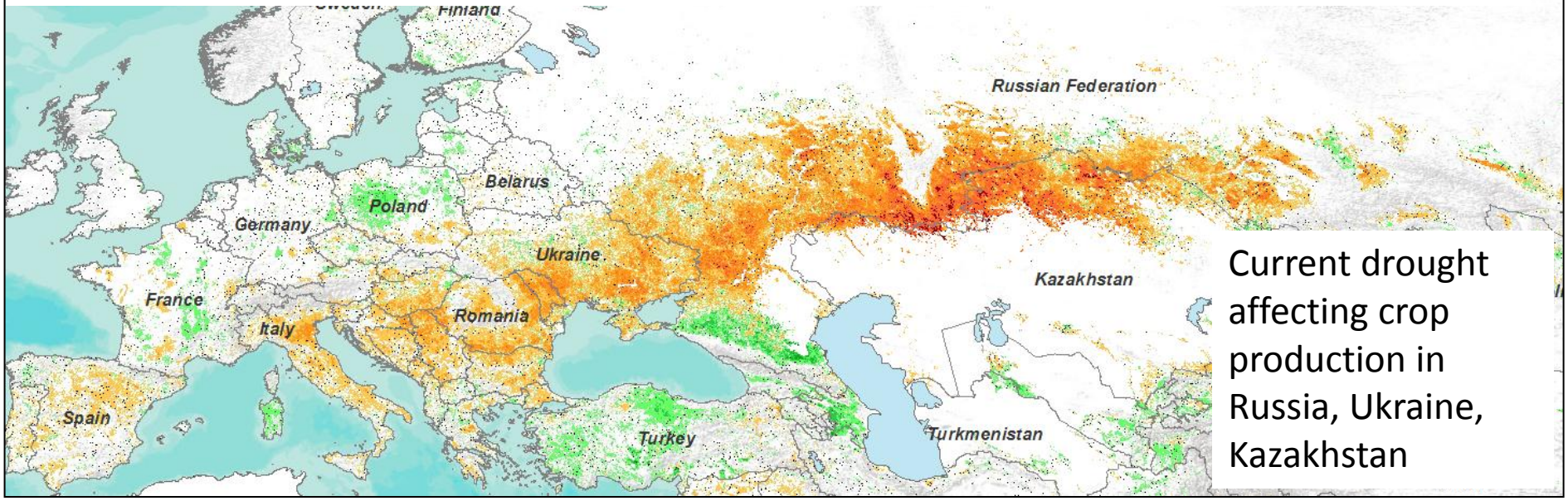
Current drought primarily affecting corn and soy crops

USA Anomaly July 17, 2011



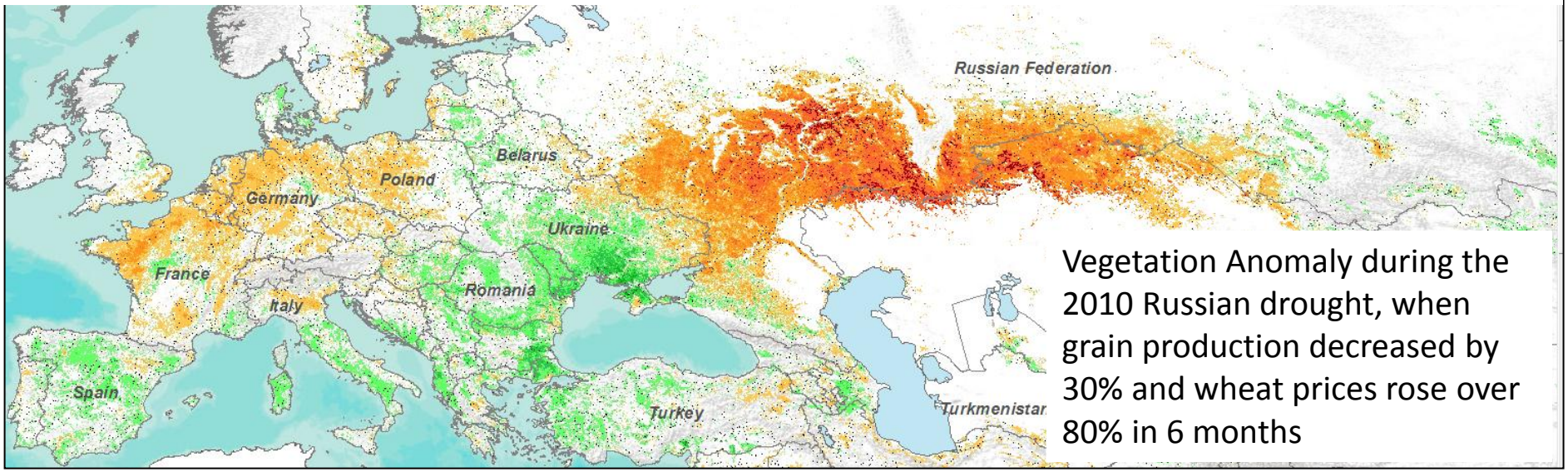
Vegetation Anomaly from last year (July 2011) showing the Texas drought)

Current Vegetation Anomaly (July 17 2012) Over Agricultural Lands

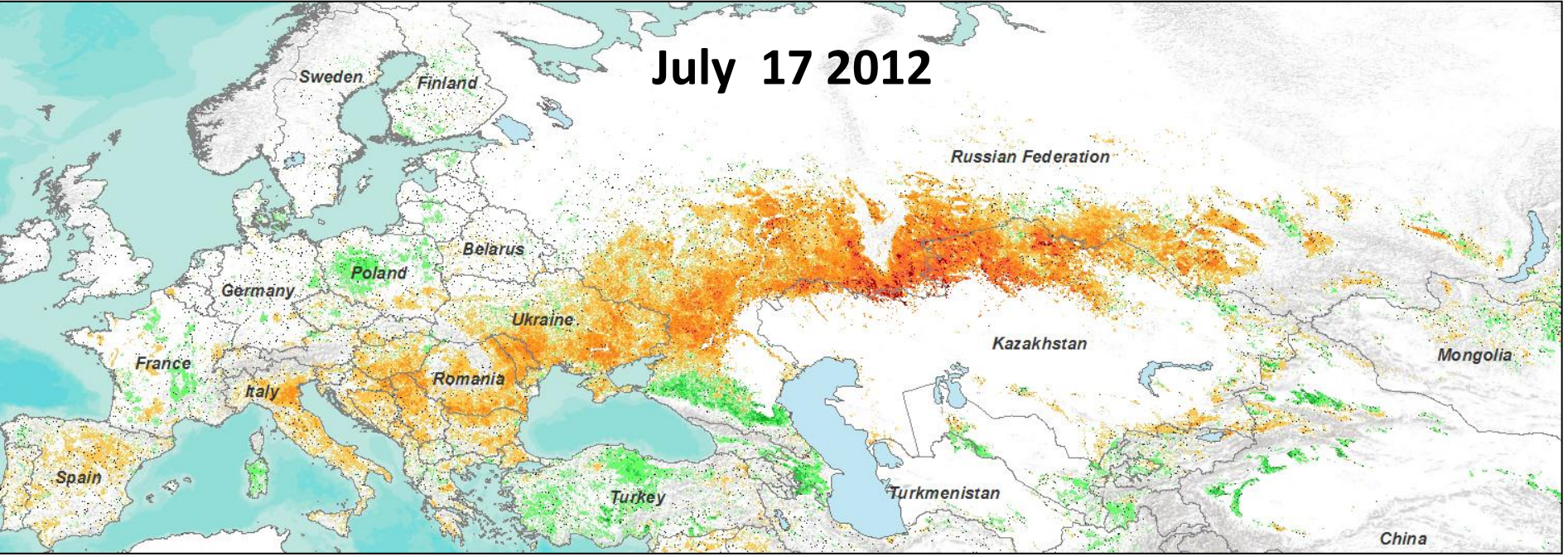


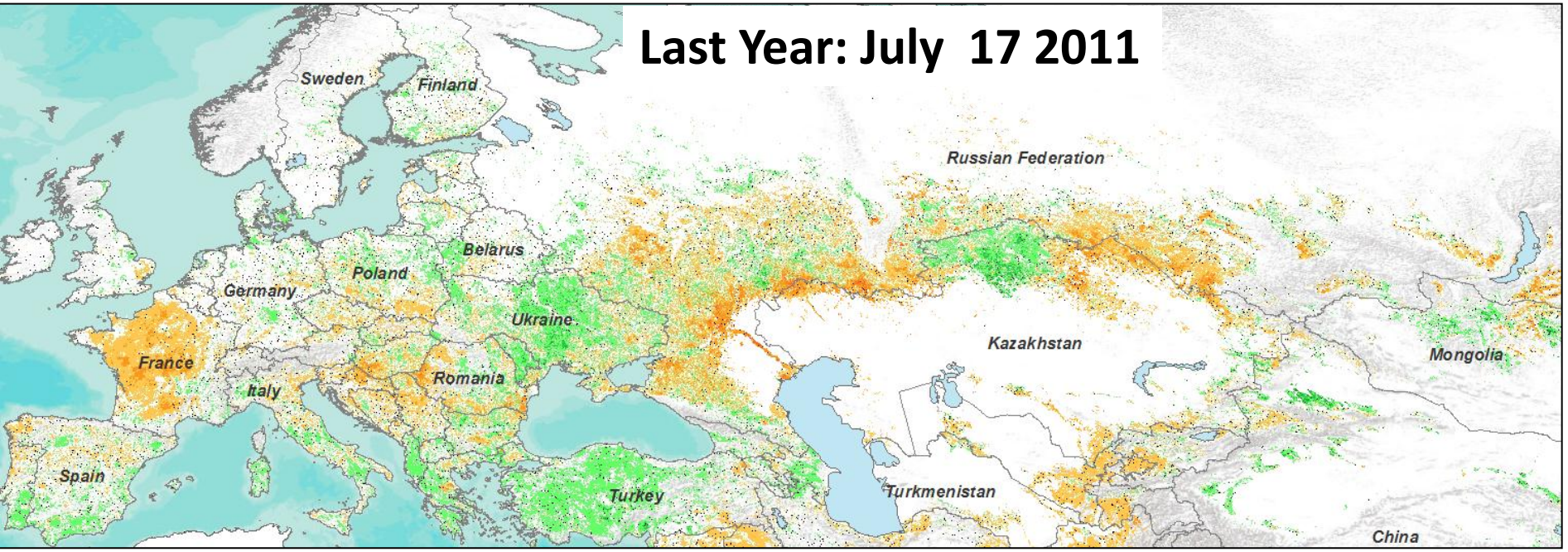
Current drought affecting crop production in Russia, Ukraine, Kazakhstan

Vegetation Anomaly During the 2010 Russian Drought: July 17 2010



Vegetation Anomaly during the 2010 Russian drought, when grain production decreased by 30% and wheat prices rose over 80% in 6 months


July 17 2012
Sweden
Finland
Russian Federation
Belarus
Poland
Germany
Ukraine
Kazakhstan
Mongolia
France
Romania
Italy
Spain
Turkey
Turkmenistan
China


Last Year: July 17 2011
Sweden
Finland
Russian Federation
Belarus
Poland
Germany
Ukraine
Kazakhstan
Mongolia
France
Romania
Italy
Spain
Turkey
Turkmenistan
China